

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) ~~Circuit A~~ circuit arrangement for a capacitive proximity switch for the determination of an operating state and having
a capacitive sensor element, whose capacitance-~~(C3)~~ changes as a function of the said operating state,
a central capacitor-~~(C2)~~,
a first controllable connecting means-~~(D2)~~ which, as a function of a triggering signal, supplies a charging voltage (U3) to the said capacitive sensor element-~~(C3)~~,
a second controllable connecting means-~~(T1)~~, which, as a function of the said triggering signal, connects the said capacitive sensor element ~~(C3)~~ to the said central capacitor ~~(C2)~~ for the a transfer of the charge from the said capacitive sensor element ~~(C3)~~ to the said central capacitor-~~(C2)~~,
~~characterized in that the~~ wherein said charging voltage (U3) is an a.e. AC voltage and the a.e. said AC voltage ~~can be~~ is supplied to the said connecting means-~~(D2, T1)~~ in such a way that, in alternating manner, the said first connecting means ~~(D2)~~ or the said second connecting means ~~(T1)~~ is conductive.
2. (Currently amended) ~~Circuit~~ The circuit arrangement according to claim 1, characterized in that the said charging voltage-~~(U3)~~ is generated with the aid of a d.e. DC voltage source-~~(U1)~~ and a square-wave voltage source-~~(U2)~~ with a common reference potential, a clamping diode ~~(D1)~~ being looped in the conducting direction between a charging voltage node ~~(N1)~~ and the d.e. said DC voltage source-~~(U1)~~ and a capacitor ~~(C1)~~ and a resistor ~~(R1)~~ are looped in in series between the said charging voltage node ~~(N1)~~ and the said square-wave voltage source-~~(U2)~~.

3. (Currently amended) ~~Circuit~~ The circuit arrangement according to claim 1 or 2, characterized in that the said first connecting means is a diode (~~D2~~) and/or the second connecting means is a bipolar transistor, particularly a pnp transistor (~~T1~~).
4. (Currently amended) ~~Circuit~~ The circuit arrangement according to claim 3, characterized in that the base of the transistor (~~T1~~) and/or the an anode of the said diode (~~D2~~) is connected to the said charging voltage node (~~N1~~), the and that a cathode of the said diode (~~D1~~) and/or the emitter of the transistor (~~T1~~) is connected to a filter resistor (~~R2~~), which is coupled to the said capacitive sensor element (~~C3~~), and the collector of the transistor (~~T1~~) is connected to the central capacitor (~~C2~~), whose other terminal is connected to a reference voltage.
5. (Currently amended) ~~Circuit~~ The circuit arrangement according to one of the preceding claims, claim 1, characterized in that a switch (~~S1~~) is connected in parallel to the central capacitor (~~C2~~).
6. (Currently amended) ~~Circuit~~ The circuit arrangement according to one of the preceding claims, claim 1, characterized in that it has several capacitive sensor elements, wherein (~~C3~~) with each of which is associated a first and a second connecting means (~~D2, T1~~), and only has one single central capacitor (~~C2~~), which is connected in the a conducting direction across in each case one decoupling diode (~~D4~~) to the particular second connecting means (~~T1~~), the said anode of the said decoupling diode (~~D4~~) being connected by a selection diode (~~D3~~) in the said conducting direction with a selection signal (~~SL1, SL2, SL3~~).
7. (Currently amended) ~~Circuit~~ The circuit arrangement according to one of the preceding claims, claim 1, characterized in that the said capacitive sensor element (~~C3~~) is constructed for application to an underside of a surface or a cover having dielectric characteristics and preferably has a smooth, planar surface for engagement purposes.
8. (Currently amended) ~~Circuit~~ The circuit arrangement according to one of the preceding claims, claim 1, characterized in that the said capacitive sensor element (~~C3~~) is a voluminous, elastic, preferably elongated body of electrically conductive material.

9. (New) The circuit arrangement according to claim 1, characterized in that said second connecting means is a bipolar transistor.

10. (New) The circuit arrangement according to claim 9, characterized in that a base of said transistor is connected to said charging voltage node, that an emitter of said transistor is connected to a filter resistor, which is coupled to said capacitive sensor element and that a collector of said transistor is connected to said central capacitor whose other terminal is connected to a reference voltage.

11. (New) The circuit arrangement according to claim 7, characterized in that said capacitive sensor element has a smooth, planar surface for engagement purposes.